

ASARCO Incorporated
Department of Environmental Sciences

EAST HELENA HYDROGEOLOGICAL STUDY

0070820
ADMINISTRATIVE RECORD
SF FILE NUMBER
1070101

WEEKLY REPORT:

Report Date 1/14/85

For Week of 1/7/85


1264370 - R8 SDMS

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date 1/9/85

By Whom Robert J. Miller, Hydrometrics, Helena, Montana

Via WESTERN AIR FREIGHT

SAMPLES RECEIVED:

Date 1/10/85

By Whom John G. Hayes, ASARCO Incorporated, S.L. City, Utah

LOG-IN INFORMATION:

Date 1/11/85

Type of Sample (water, sediment, other)

Number of Samples

SOIL

5

	<u>Yes</u>	<u>No</u>
Were samples properly preserved?	<u>X</u>	<u> </u>
Did Chain-of-Custody Sheet accompany samples?	<u>X</u>	<u> </u>
Were all samples accounted for?	<u>X</u>	<u> </u>
Were Chain-of-Custody Sheets signed appropriately?	<u>X</u>	<u> </u>
Were seals on shipping coolers/containers unbroken?	<u>X</u>	<u> </u>
Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?	<u>X</u>	<u> </u>
Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?	<u>X</u>	<u> </u>

COMMENTS:

Samples Analyzed:

[illegible]

COMMENTS: No analyses performed

Were Results Reported? YES _____ NO _____

Report Date:

Bv:

John G. Hayes

cc: DARobbins
JCNickel

0070822

ENVIRONMENTAL PROTECTION
AGENCY
JAN 16 1985
MONTANA OFFICE

Line

0070823

ASARCO Incorporated
Department of Environmental Sciences

EAST HELENA HYDROGEOLOGICAL STUDY

WEEKLY REPORT:

Report Date 1/21/85

For Week of 1/14/85

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date 1/11/85, 1/14/85

By Whom Robert J. Miller, Hydrometrics, Helena, Mt.

Via Western Air Freight

SAMPLES RECEIVED:

Date 1/21/85, 1/16/85

By Whom Gary R. Stanga, John C. Hayes - ASARCO Inc.
Salt Lake City, Ut

LOG-IN INFORMATION:

Date 1/17/85

<u>Type of Sample (water, sediment, other)</u>	<u>Number of Samples</u>
Water	38 Samples from 15 site
_____	_____
_____	_____
_____	_____
_____	_____

Were samples properly preserved?

Yes No

X _____

Did Chain-of-Custody Sheet accompany samples?

X _____

Were all samples accounted for?

X _____

Were Chain-of-Custody Sheets signed appropriately?

X _____

Were seals on shipping coolers/containers unbroken?

X _____

Were individual sample containers in good condition
(e.g., no leakage, caps tight, bags sealed)?

X _____

Were samples put into a secure area and stored
properly upon receipt (i.e., locked room,
locked refrigerator)?

X _____

COMMENTS:

Mr. Stanga brought two samples dated 1/11/85 back from East Helena
on a return flight.

KC

0070825

ENVIRONMENTAL PROTECTION
AGENCY

JAN 23 1985

MONTANA OFFICE

0070826

WEEKLY REPORT:

Any Samples Received? YES X NO ____ (If "NO", go to Analytical)

Via Western Air Freight

By Whom John G. Hayes, ASARCO Incorporated, Salt Lake City, Utah

Date January 22, 1985, January 23, 1985

Number of Samples

37 Samples from 18 Sites

4 Samples from 3 Sites

No

X

X

X

X

X

X

X

COMMENTS:

KC

Samples Analyzed:

COMMENTS:

John G. Hayes

cc: JCNickel
DARobbins
GRStanga

0070828

ENVIRONMENTAL PROTECTION
AGENCY
JAN 30 1985
MONTANA OFFICE

Gene

EAST HELENA HYDROGEOLOGICAL STUDY

Report Date February 4, 1985

For Week of January 28, 1985

Any Samples Received? YES NO x (If "NO", go to Analytical)

Date _____

By Whom _____

Via _____

Date _____

By Whom _____

Date _____

Type of Sample (water, sediment, other)

Number of Samples

Yes

No

Were samples properly preserved?

Did Chain-of-Custody Sheet accompany samples?

Were all samples accounted for?

Were Chain-of-Custody Sheets signed appropriately?

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Were seals on shipping coolers/containers unbroken?

Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?

Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?

COMMENTS:

0070830

ANALYTICAL SECTION

Samples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-533	AEH-8501-101	Alkalinity	John G. Hayes
85-534	AEH-8501-102	Alkalinity	John G. Hayes
85-535	AEH-8501-103	Alkalinity	John G. Hayes
85-536	AEH-8501-104	Alkalinity	John G. Hayes
85-537	AEH-8501-105	Alkalinity	John G. Hayes
85-538	AEH-8501-106	Alkalinity	John G. Hayes
85-539	AEH-8501-107	Alkalinity	John G. Hayes
85-540	AEH-8501-108	Alkalinity	John G. Hayes
85-541	AEH-8501 109	Alkalinity	John G. Hayes
85-542	AEH-8501-110	Alkalinity	John G. Hayes
85-696	AEH-8501-116	Alkalinity	John G. Hayes
85-676	AEH-8501-117	Alkalinity	John G. Hayes
85-677	AEH-8501-118	Alkalinity	John G. Hayes
85-678	AEH-8501-119	Alkalinity	John G. Hayes
85-679	AEH-8501-120	Alkalinity	John G. Hayes
85-680	AEH-8501-121	Alkalinity	John G. Hayes
85-682	AEH-8501-122	Alkalinity	John G. Hayes
85-684	AEH-8501-123	Alkalinity	John G. Hayes
85-685	AEH-8501-124	Alkalinity	John G. Hayes
85-686	AEH-8501-125	Alkalinity	John G. Hayes

COMMENTS:

Were Results Reported? YES ☐ NO ☐

Report Date:

Samples Analyzed:

COMMENTS:

By: John A. Hargood

cc: JCNickel
DARobbins
GRStanga

0070832

WEEKLY REPORT:

For Week of February 4, 1985

Any Samples Received? YES _____ NO X (If "NO", go to Analytical)

SAMPLES SENT:

Date _____

By Whom _____

Via _____

SAMPLES RECEIVED:

Date _____

By Whom _____

LOG-IN INFORMATION:

Date _____

Type of Sample (water, sediment, other).

Number of Samples

Yes

No

Were samples properly preserved?

Did Chain-of-Custody Sheet accompany samples?

Were all samples accounted for?

~~_____~~

Were Chain-of-Custody Sheets signed appropriately?

Were seals on shipping coolers/containers unbroken?

Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?

100

Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?

COMMENTS:

ANALYTICAL SECTIONSamples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-533	AEH-8501-101	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-534	AEH-8501-102	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-535	AEH-8501-103	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-536	AEH-8501-104	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-537	AEH-8501-105	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-538	AEH-8501-106	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-539	AEH-8501-107	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-540	AEH-8501-108	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-541	AEH-8501-109	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-542	AEH-8501-110	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-696	AEH-8501-116	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-676	AEH-8501-117	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-677	AEH-8501-118	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-678	AEH-8501-119	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-679	AEH-8501-120	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-680	AEH-8501-121	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-682	AEH-8501-122	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-684	AEH-8501-123	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-685	AEH-8501-124	SO ₄ ⁼ , Cl ⁻	John G. Hayes
85-686	AEH-8501-125	SO ₄ ⁼ , Cl ⁻	John G. Hayes

COMMENTS:Were Results Reported? YES ☐ NO ☐

Report Date: _____

ANALYTICAL SECTION

[illegible]

COMMENTS: Samples digested and concentrated for metals analysis.

Were Results Reported? YES _____ NO X

Report Date:

cc: J.C. Nickel
D.A. Robbins
G.R. Stanga

By

John G. Hayes

0070835

ENVIRONMENTAL PROTECTION
AGENCY
FEB 14 1985
MONTANA OFFICE

Samples Analyzed:

COMMENTS:

Were Results Reported? YES X NO

Report Date: February 22, 1985

cc: JCNickel
MOVarner

DARobbins
GRStanga

By :

John G. Hayes

Gene

EAST HELENA HYDROGEOLOGICAL STUDY

Report Date April 8, 1985

Any Samples Received? YES X NO (If "NO", go to Analytical)

Date April 5, 1985

Via Western Air Freight Air Bill # 017-3608-0155

Date April 5, 1985

By Whom John G. Hayes, ASARCO Incorporated, Salt Lake City, Utah

Date April 8, 1985

<u>Type of Sample (water, sediment, other)</u>	<u>Number of Samples</u>
Surface Waters	55 containers from 16 sites

Surface Waters	from 16 sites

Yes No

X

X _____

X

X

X

X

X

Samples Analyzed:

[illegible]

Samples were received late Friday - no analyses run

John G. Hayes
John G. Hayes

cc: JCNickel
MOVarner
DARobbins
GRStanga

0070840

ENVIRONMENTAL PROTECTION
AGENCY

APR 10 1985

MONTANA OFFICE

0070841

WEEKLY REPORT:

For Week of April 15, 1985

SAMPLES SENT:

By Whom _____

Via _____

SAMPLES RECEIVED:

Date _____

By Whom _____

LOG-IN INFORMATION:

Date _____

Type of Sample (water, sediment, other)

Number of Samples

Yes

No

COMMENTS:

0070842

ANALYTICAL SECTION

Samples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-2473	AEH-8504-312	Cond., TDS, pH	John G. Hayes
85-2474	AEH-8504-313	Cond., TDS, pH	John G. Hayes
85-2475	AEH-8504-314	Cond., TDS, pH	John G. Hayes
85-2476	AEH-8504-315	Cond., TDS, pH	John G. Hayes
85-2477	AEH-8504-316	Cond., TDS, pH	John G. Hayes
85-2478	AEH-8504-317	Cond., TDS, pH	John G. Hayes
85-2479	AEH-8504-318	Cond., TDS, pH	John G. Hayes
85-2480	AEH-8504-319	Cond., TDS, pH	John G. Hayes
85-2481	AEH-8504-320	Cond., TDS, pH	John G. Hayes
85-2482	AEH-8504-321	Cond., TDS, pH	John G. Hayes
85-2487	AEH-8504-337	Cond., TDS, pH	John G. Hayes
85-2344	AEH-8504-309	Alkalinity, Cl ⁻	John G. Hayes
85-2345	AEH-8504-310	Alkalinity, Cl ⁻	John G. Hayes
85-2346	AEH-8504-311	Alkalinity, Cl ⁻	John G. Hayes
85-2347	AEH-8504-330	Alkalinity, Cl ⁻	John G. Hayes
85-2349	AEH-8504-332	Alkalinity, Cl ⁻	John G. Hayes
85-2352	AEH-8504-335	Alkalinity, Cl ⁻	John G. Hayes

COMMENTS:

Were Results Reported? YES _____ NO X

Report Date: _____

By: _____

John G. Hayes
John G. Hayes

cc: JCNickel
MOVarner
DARobbins/GRStanga

ASARCO Incorporated
Department of Environmental Sciences

Gene
0070843

EAST HELENA HYDROGEOLOGICAL STUDY

WEEKLY REPORT:

Report Date April 29, 1985

For Week of April 22, 1985

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date April 22, 1985

By Whom Robert J. Miller, HYDROMETRICS, Helena, Montana

Via Western Air Freight Airbill No. 017-3608-0354.

SAMPLES RECEIVED:

Date April 23, 1985

By Whom John G. Hayes, ASARCO Incorporated, Salt Lake City, Utah

LOG-IN INFORMATION:

Date April 24, 1985

Type of Sample (water, sediment, other) .

Number of Samples

Water

11 Samples from
4 Sites

Were samples properly preserved?

Yes No

X

Did Chain-of-Custody Sheet accompany samples?

X

Were all samples accounted for?

X

Were Chain-of-Custody Sheets signed appropriately?

X

Were seals on shipping coolers/containers unbroken?

X

Were individual sample containers in good condition
(e.g., no leakage, caps tight, bags sealed)?

X

Were samples put into a secure area and stored
properly upon receipt (i.e., locked room,
locked refrigerator)?

X

COMMENTS:

HC

Samples Analyzed:

COMMENTS: Metals digestion on surface and groundwater samples.

cc: JCNickel
MOVarner
DARobbins/GRStanga

0070845

ENVIRONMENTAL PROTECTION
AGENCY

MAY 03 1985

MONTANA OFFICE

ASARCO Incorporated
Department of Environmental Sciences

EAST HELENA HYDROGEOLOGICAL STUDY

Gene
ASARCO 0070846

WEEKLY REPORT: Report Date May 9, 1985
For Week of April 29, 1985
Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT: Date April 29, 1985
By Whom Robert J. Miller, Hydrometrics, Helena, Montana
Via Western Air Freight Air Bill #017 3608 2001

SAMPLES RECEIVED: Date April 30, 1985
By Whom John G. Hayes, ASARCO Incorporated, Salt Lake City, Utah

LOG-IN INFORMATION: Date April 30, 1985

<u>Type of Sample (water, sediment, other)</u>	<u>Number of Samples</u>
Water	6 Samples From 3 Sites
_____	_____
_____	_____
_____	_____

	<u>Yes</u>	<u>No</u>
Were samples properly preserved?	<u>X</u>	_____
Did Chain-of-Custody Sheet accompany samples?	<u>X</u>	_____
Were all samples accounted for?	<u>X</u>	_____
Were Chain-of-Custody Sheets signed appropriately?	<u>X</u>	_____
Were seals on shipping coolers/containers unbroken?	<u>X</u>	_____
Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?	<u>X</u>	_____
Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?	<u>X</u>	_____

COMMENTS:

0070847

ANALYTICAL SECTIONSamples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-2338	AEH-8504-301	Pb, Cd, Zn, As	John G. Hayes
85-2339	AEH-8504-302	Pb, Cd, Zn, As	John G. Hayes
85-2340	AEH-8504-303	Pb, Cd, Zn, As	John G. Hayes
85-2341	AEH-8504-305	Mn Pb, Cd, Zn, As, Cu, Fe,	John G. Hayes
85-2342	AEH-8504-306	Mn, Pb, Cd, Zn, As, Cu, Fe	John G. Hayes
85-2343	AEH-8504-307	Mn, Pb, Cd, Zn, As, Cu, Fe	John G. Hayes
85-2344	AEH-8504-309	Mn, Pb, Cd, Zn, As, Cu, Fe, Ca, Mg, Na, K	John G. Hayes
85-2345	AEH-8504-310	Mn, Pb, Cd, Zn, As, Cu Fe, Ca, Mg, Na, K	John G. Hayes
85-2346	AEH-8504-311	Mn, Pb, Cd, Zn, As, Cu, Fe, Ca, Mg, Na, K	John G. Hayes
85-2347	AEH-8504-330	Mn, Pb, Cd, Zn, As, Cu, Fe, Ca, Mg, Na, K	John G. Hayes
85-2348	AEH-8504-331	Pb, Cd, Zn, As	John G. Hayes
85-2349	AEH-8504-332	Ca, Mg, Na, K, Mn Pb, Cd, Zn, As, Fe, Cu	John G. Hayes
85-2350	AEH-8504-333	Pb, Cd, Zn, As	John G. Hayes
85-2351	AEH-8504-334	Pb, Cd, Zn, As	John G. Hayes
85-2352	AEH-8504-335	Mn, Ca, Mg, K, Na Pb, Cd, Zn, As, Cu, Fe	John G. Hayes
85-2353	AEH-8504-336	Pb, Cd, Zn, As	John G. Hayes
85-2471	AEH-8504-304	Pb, Cd, Zn	John G. Hayes
85-2472	AEH-8504-308	Pb, Cd, Zn	John G. Hayes
85-2473	AEH-8504-312	Pb, Cd, Zn	John G. Hayes
85-2474	AEH-8504-313	Pb, Cd, Zn	John G. Hayes

COMMENTS:

Were Results Reported? YES ☐ NO ☐Report Date:

Samples Analyzed:

COMMENTS:

Were Results Reported? YES NO X

Report Date: May 9, 1985

cc: NCNickel
MOVarner
DARobbins/GRStanga

John G. Hayes
by John G. Hayes

0070849

ENVIRONMENTAL PROTECTION
AGENCY

MAY 15 1985

MONTANA OFFICE

ASARCO Incorporated
Department of Environmental Sciences

EAST HELENA HYDROGEOLOGICAL STUDY

Gene
0070850
ASARCO

WEEKLY REPORT:

Report Date May 14, 1985

For Week of May 6, 1985

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date May 6, 1985

By Whom Robert J. Miller, HYDROMETRICS, Helena, Montana

Via Western Air Freight, Airbill #017-3608-1964

SAMPLES RECEIVED:

Date May 6, 1985

By Whom John G. Haves, ASARCO Incorporated, Salt Lake City, Utah

LOG-IN INFORMATION:

Date May 8, 1985

Type of Sample (water, sediment, other)

Number of Samples

Water

6 samples from
3 sites

	<u>Yes</u>	<u>No</u>
Were samples properly preserved?	<u>X</u>	<u> </u>
Did Chain-of-Custody Sheet accompany samples?	<u>X</u>	<u> </u>
Were all samples accounted for?	<u>X</u>	<u> </u>
Were Chain-of-Custody Sheets signed appropriately?	<u>X</u>	<u> </u>
Were seals on shipping coolers/containers unbroken?	<u>X</u>	<u> </u>
Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?	<u>X</u>	<u> </u>
Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?	<u>X</u>	<u> </u>

COMMENTS:

ANALYTICAL SECTIONSamples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-2471	AEH-8504-304	As	John G. Hayes
85-2472	AEH-8504-308	As	John G. Hayes
85-2473	AEH-8504-312	As	John G. Hayes
85-2474	AEH-8504-313	As	John G. Hayes
85-2475	AEH-8504-314	As	John G. Hayes
85-2476	AEH-8504-315	As	John G. Hayes
85-2477	AEH-8504-316	As	John G. Hayes
85-2478	AEH-8504-317	As	John G. Hayes
85-2479	AEH-8504-318	As	John G. Hayes
85-2480	AEH-8504-319	As	John G. Hayes
85-2481	AEH-8504-320	As	John G. Hayes
85-2482	AEH-8504-321	As	John G. Hayes
85-2483	AEH-8504-322	As	John G. Hayes
85-2484	AEH-8504-323	As	John G. Hayes
85-2485	AEH-8504-326	As	John G. Hayes
85-2486	AEH-8504-327	As	John G. Hayes
85-2487	AEH-8504-337	As	John G. Hayes
85-2941	AEH-8504-338	Alkalinity, $\text{SO}_4^{=}$, Cl^{-}	John G. Hayes

COMMENTS: Metals digestion for current Wilson Ditch samples.

Were Results Reported? YES ☐ NO ☒

Report Date: _____

cc: JCNickel

MOVarner

DARobbins/GRStanga

By: _____

John G. Hayes

0070852

ENVIRONMENTAL PROTECTION
AGENCY

MAY 16 1985

MONTANA OFFICE

Gene 0070853
NSARC O

Samples Analyzed:

COMMENTS:

Were Results Reported? YES NO X

Report Date:

DARobbins
GRStanga

by

John G. Hayes

0070855

ENVIRONMENTAL PROTECTION
AGENCY

MAY 28 1985

MONTANA OFFICE

ASARCO Incorporated
Department of Environmental Sciences

ASARCO *Gene*
0070856
to CLR

EAST HELENA HYDROGEOLOGICAL STUDY

WEEKLY REPORT:

Report Date May 29, 1985

For Week of May 20, 1985

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date May 15, 1985 (Groundwaters) May 17, 1985 (Wilson Ditch)

By Whom Robert I. Miller, Jim Dushin - Hydrometrics, Helena, Mt.

Via Western Air Freight bill #'s 01740563121,
01740563202

SAMPLES RECEIVED:

Date May 17, 1985, May 20, 1985

By Whom John G. Hayes, ASARCO Incorporated, S.L.C., Utah

LOG-IN INFORMATION:

Date May 20, 1985, May 21, 1985

Type of Sample (water, sediment, other)

Number of Samples

Groundwaters

57 samples from 27 sites

Wilson Ditch Waters

8 samples from 3 sites

	<u>Yes</u>	<u>No</u>
Were samples properly preserved?	<u>X</u>	<u> </u>
Did Chain-of-Custody Sheet accompany samples?	<u>X</u>	<u> </u>
Were all samples accounted for?	<u>X</u>	<u> </u>
Were Chain-of-Custody Sheets signed appropriately?	<u>X</u>	<u> </u>
Were seals on shipping coolers/containers unbroken?	<u>X</u>	<u> </u>
Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?	<u>X</u>	<u> </u>
Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?	<u>X</u>	<u> </u>

COMMENTS:

KC

ANALYTICAL SECTION

Samples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-3615	AEH-8505-412	Conductivity, TDS,pH	John G. Hayes
85-3616	AEH-8505-413	Conductivity, TDS,pH	John G. Hayes
85-3617	AEH-8505-414	Conductivity, TDS,pH	John G. Hayes
85-3618	AEH-8505-415	Conductivity, TDS,pH	John G. Hayes
85-3619	AEH-8505-416	Conductivity, TDS,pH	John G. Hayes
85-3620	AEH-8505-417	Conductivity, TDS,pH	John G. Hayes
85-3621	AEH-8505-418	Conductivity, TDS,pH	John G. Hayes
85-3622	AEH-8505-419	Conductivity, TDS,pH	John G. Hayes
85-3623	AEH-8505-420	Conductivity, TDS,pH	John G. Hayes
85-3624	AEH-8505-421	Conductivity, TDS,pH	John G. Hayes
85-3625	AEH-8505-455	Conductivity, TDS,pH	John G. Hayes
85-3626	AEH-8505-456	Conductivity, TDS,pH	John G. Hayes
85-3627	AEH-8505-457	Conductivity, TDS,pH	John G. Hayes
85-3628	AEH-8505-458	Conductivity, TDS,pH	John G. Hayes
85-3629	AEH-8505-459	Conductivity, TDS,pH	John G. Hayes
95-3630	AEH-8505-460	Conductivity, TDS,pH	John G. Hayes
85-3631	AEH-8505-461	Conductivity, TDS,pH	John G. Hayes
85-3632	AEH-8505-462	Conductivity, TDS,pH	John G. Hayes
85-3633	AEH-8505-463	Conductivity, TDS,pH	John G. Hayes
85-3634	AEH-8505-464	Conductivity, TDS,pH	John G. Hayes

COMMENTS:

Were Results Reported? YES ☐ NO ☐

Report Date: _____

Samples Analyzed:

COMMENTS:

Were Results Reported? YES NO X

Report Date:

by:

John G. Hayes

cc: JCNickel
MOVarner

DARobbins
GRStanga

0070859

ENVIRONMENTAL PROTECTION
AGENCY

JUN 3 1985

MONTANA OFFICE

ASARCO Incorporated
Department of Environmental Sciences

ASARCO *Stene*
0070860
Jo Alm

EAST HELENA HYDROGEOLOGICAL STUDY

WEEKLY REPORT:

Report Date 6/3/85

For Week of 5/28/85

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date 5/24/86

By Whom Jim Dushin, Hydrometrics, Helena, Montana

Via Western Air Freight Airbill #017 4056 3294

SAMPLES RECEIVED:

Date 5/26/85

By Whom John G. Hayes, ASARCO, Salt Lake City, Utah

LOG-IN INFORMATION:

Date 5/28/85

Type of Sample (water, sediment, other)

Number of Samples

Water

8 Samples from

3 sites.

Were samples properly preserved?

Yes

No

X

Did Chain-of-Custody Sheet accompany samples?

X

Were all samples accounted for?

X

Were Chain-of-Custody Sheets signed appropriately?

X

Were seals on shipping coolers/containers unbroken?

X

Were individual sample containers in good condition
(e.g., no leakage, caps tight, bags sealed)?

X

Were samples put into a secure area and stored
properly upon receipt (i.e., locked room,
locked refrigerator)?

X

COMMENTS:

KC

Samples Analyzed:

COMMENTS:

Were Results Reported? YES NO

Report Date:

by:

John G. Hayes

cc: JCNickel
MOVarnar
DARobbins
GRStanga

0070862

ENVIRONMENTAL PROTECTION
AGENCY

JUN 05 1985

MONTANA OFFICE

ASARCO Incorporated
Department of Environmental Sciences

ASARCO
0070863

EAST HELENA HYDROGEOLOGICAL STUDY

WEEKLY REPORT:

Report Date 6/13/85

For Week of 6/3/85

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date 5/31/85

By Whom Jim Dushin, Hydrometrics, Helena, Montana

Via Western Air Freight Air Bill #017 4056 3434

SAMPLES RECEIVED:

Date 6/3/85

By Whom John G. Hayes, ASARCO Inc., Salt Lake City, Utah

LOG-IN INFORMATION:

Date 6/4/85

Type of Sample (water, sediment, other)

Number of Samples

Water

24 Samples from 9 sites

Were samples properly preserved?

Yes

No

X

Did Chain-of-Custody Sheet accompany samples?

X

Were all samples accounted for?

X

Were Chain-of-Custody Sheets signed appropriately?

X

Were seals on shipping coolers/containers unbroken?

X

Were individual sample containers in good condition
(e.g., no leakage, caps tight, bags sealed)?

X

Were samples put into a secure area and stored
properly upon receipt (i.e., locked room,
locked refrigerator)?

X

COMMENTS:

KC

ANALYTICAL SECTIONSamples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-3940	AEH-8505-A	TDS, pH, TSS	J.G. Hayes
85-3941	AEH-8505-B	TDS, pH, TSS	J.G. Hayes
85-3942	AEH-8505-C	TDS, pH, TSS	J.G. Hayes
85-3943	AEH-8505-D	TDS, pH, TSS	J.G. Hayes
85-3948	AEH-8505-449	TDS, pH, TSS	J.G. Hayes
85-3498	AEH-8505-432	Zn, Cd, As	J.G. Hayes
85-3499	AEH-8505-433	Zn, Cd, As	J.G. Hayes
85-3500	AEH-8505-434	Zn, Cd, As	J.G. Hayes
85-3501	AEH-8505-435	Zn, Cd, As	J.G. Hayes
85-3502	AEH-8505-436	Zn, Cd, As	J.G. Hayes
85-3503	AEH-8505-437	Zn, Cd, As, Cu, Fe, Mn	J.G. Hayes
85-3504	AEH-8505-452	Zn, Cd, As, Cu, Fe, Mn	J.G. Hayes
85-3505	AEH-8505-453	Zn, Cd, As, Cu, Fe, Mn	J.G. Hayes
85-3506	AEH-8505-454	Zn, Cd, As, Cu, Fe, Mn	J.G. Hayes
85-3611	AEH-8505-403	As, Cd, Zn	J.G. Hayes
85-3612	AEH-8505-404	As, Cd, Zn	J.G. Hayes
85-3613	AEH-8505-407	As, Cd, Zn	J.G. Hayes
85-3614	AEH-8505-408	As, Cd, Zn	J.G. Hayes
85-3615	AEH-8505-412	As, Cd, Zn	J.G. Hayes
85-3616	AEH-8505-413	As, Cd, Zn	J.G. Hayes

COMMENTS: Metal digestions

Were Results Reported? YES ☐ NO ☐

Report Date: _____

Samples Analyzed:

[illegible]

COMMENTS:

Were Results Reported? YES NO X

Report Date:

cc: JCNickel DARobbins
MOVarner GRStanga

by John G. Hayes
John G. Hayes

0070866

ENVIRONMENTAL PROTECTION
AGENCY

JUN 17 1985

MONTANA OFFICE

ASARCO Incorporated
Department of Environmental Sciences

ASARCO
Gens
0070867

EAST HELENA HYDROGEOLOGICAL STUDY

WEEKLY REPORT:

Report Date 6/18/85

For Week of 6/10/85

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date 6/7/85

By Whom Robert J. Miller, Hydrometrics, Helena, Montana

Via Western Air Freight, Airbill #017 4056 9616

SAMPLES RECEIVED:

Date 6/8/85

By Whom John G. Hayes, ASARCO Inc., Salt Lake City, Utah

LOG-IN INFORMATION:

Date 6/10/85

Type of Sample (water, sediment, other)

Number of Samples

Water

65 Samples from 18 Sites

Sediment

4 Samples from 4 sites

	<u>Yes</u>	<u>No</u>
Were samples properly preserved?	<u>X</u>	<u> </u>
Did Chain-of-Custody Sheet accompany samples?	<u>X</u>	<u> </u>
Were all samples accounted for?	<u>X</u>	<u> </u>
Were Chain-of-Custody Sheets signed appropriately?	<u>X</u>	<u> </u>
Were seals on shipping coolers/containers unbroken?	<u>X</u>	<u> </u>
Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?	<u>X</u>	<u> </u>
Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?	<u>X</u>	<u> </u>

COMMENTS:

10

Samples Analyzed:

COMMENTS:

Were Results Reported? YES NO X

Report Date:

cc: JCNickel
MOVarnar
DARobbins
GRStanga

by John G. Hayes

John G. Hayes

0070869

MONTANA OFFICE
JUN 21 1985
ENVIRONMENTAL PROTECTION
AGENCY

ASARCO Incorporated
Department of Environmental Sciences

EAST HELENA HYDROGEOLOGICAL STUDY

Gene
0070870
ASARCO

WEEKLY REPORT:

Report Date 6/26/85

For Week of 6/17/85

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date 6/17/85

By Whom Robert J. Miller, Hydrometrics, Helena, Montana

Via Western Air Freight, Air Bill #40969222

SAMPLES RECEIVED:

Date 6/19/85

By Whom John G. Hayes, ASARCO Incorporated, S.L.C., Utah

LOG-IN INFORMATION:

Date 6/19/85

Type of Sample (water, sediment, other)

Number of Samples

Water

48 Samples from 22 Sites

	<u>Yes</u>	<u>No</u>
Were samples properly preserved?	<u>X</u>	<u> </u>
Did Chain-of-Custody Sheet accompany samples?	<u>X</u>	<u> </u>
Were all samples accounted for?	<u>X</u>	<u> </u>
Were Chain-of-Custody Sheets signed appropriately?	<u>X</u>	<u> </u>
Were seals on shipping coolers/containers unbroken?	<u>X</u>	<u> </u>
Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?	<u>X</u>	<u> </u>
Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?	<u>X</u>	<u> </u>

COMMENTS:

12c

Samples Analyzed:

COMMENTS:

Were Results Reported? YES NO X

Report Date:

cc: JCNickel
MOVarner
DARobbins
GRStanga

by:

John G. Hayes

0070872

ENVIRONMENTAL PROTECTION
AGENCY

JUL 1 1985

MONTANA OFFICE

ASARCO Incorporated
Department of Environmental Sciences

EAST HELENA HYDROGEOLOGICAL STUDY

Gene
ASARCO

0070873

WEEKLY REPORT:

Report Date 7/3/85

For Week of 6/24/85

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date 6/24/85

By Whom Jim Dushin - HYDROMETRICS, Helena, Montana

Via Western Air Freight Air Bill #40569426

SAMPLES RECEIVED:

Date 6/25/85

By Whom John G. Hayes - ASARCO, Salt Lake City, Utah

LOG-IN INFORMATION:

Date 6/26/85

Type of Sample (water, sediment, other)

Number of Samples

Water

8 Samples from
3 Sites

Yes

No

Were samples properly preserved?

X

Did Chain-of-Custody Sheet accompany samples?

X

Were all samples accounted for?

X

Were Chain-of-Custody Sheets signed appropriately?

X

Were seals on shipping coolers/containers unbroken?

X

Were individual sample containers in good condition
(e.g., no leakage, caps tight, bags sealed)?

X

Were samples put into a secure area and stored
properly upon receipt (i.e., locked room,
locked refrigerator)?

X

COMMENTS:

Samples Analyzed:

COMMENTS: Metals Digestions

By: John G. Hayes

0070875

ENVIRONMENTAL PROTECTION
AGENCY

JUL 08 1985

MONTANA OFFICE

Gene 0070876
ASBRO

JUL 12 1985

EAST HELENA HYDROGEOLOGICAL STUDY

WEEKLY REPORT:

Report Date 7/9/85

For Week of 7/1/85

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date 7/3/85

By Whom Robert J. Miller, Hydrometrics, Helena, Montana

Via Western Air Freight, Airbill #017 4056-9723

SAMPLES RECEIVED:

Date 7/5/85

By Whom John G. Hayes, Asarco, Salt Lake City, Utah.

LOG-IN INFORMATION:

Date 7/8/85

Type of Sample (water, sediment, other)

Number of Samples

Water Samples

42 Samples from
13 sites.

Were samples properly preserved?

Yes

No

X

Did Chain-of-Custody Sheet accompany samples?

X

Were all samples accounted for?

X

Were Chain-of-Custody Sheets signed appropriately?

X

Were seals on shipping coolers/containers unbroken?

X

Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?

X

Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?

X

COMMENTS:

ANALYTICAL SECTIONSamples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-4750	AEH-8507-609	pH, TDS, TSS, Cond.	J.G. Hayes
85-4751	AEH-8507-610	pH, TDS, TSS, Cond.	J.G. Hayes
85-4752	AEH-8507-611	pH, TDS, TSS, Cond.	J.G. Hayes
85-4753	AEH-8507-612	pH, TDS, TSS, Cond.	J.G. Hayes
85-4754	AEH-8507-613	pH, TDS, TSS, Cond.	J.G. Hayes
85-4755	AEH-8507-614	pH, TDS, TSS, Cond.	J.G. Hayes
85-4756	AEH-8507-615	pH, TDS, TSS, Cond.	J.G. Hayes
85-4757	AEH-8507-619	pH, TDS, TSS, Cond.	J.G. Hayes
85-4758	AEH-8507-633	Pb, Cd, Zn	J.G. Hayes
85-4493	AEH-8506-543	Pb, Cd, Zn	J.G. Hayes
85-4494	AEH-8506-542	Pb, Cd, Zn	J.G. Hayes
85-4495	AEH-8506-541	Pb, Cd, Zn	J.G. Hayes
85-4496	AEH-8506-526	Pb, Cd, Zn	J.G. Hayes
85-4497	AEH-8506-525	Pb, Cd, Zn	J.G. Hayes
85-4498	AEH-8506-524	Pb, Cd, Zn	J.G. Hayes
85-4499	AEH-8506-522	Pb, Cd, Zn	J.G. Hayes
85-4500	AEH-8506-521	Pb, Cd, Zn	J.G. Hayes
85-4501	AEH-8506-520	Pb, Cd, Zn	J.G. Hayes
85-4502	AEH-8506-519	Pb, Cd, Zn	J.G. Hayes
85-4503	AEH-8506-518	Pb, Cd, Zn	J.G. Hayes

COMMENTS:Were Results Reported? YES ☐ NO ☐

Report Date: _____

Samples Analyzed:

COMMENTS:

Were Results Reported? YES NO X

Report Date:

cc: JCNickel DARobbins
 MOVarnier GRStanga

by:

John G. Hayes

ASARCO Incorporated
Department of Environmental Sciences

Gene 0070879
ASARCO

EAST HELENA HYDROGEOLOGICAL STUDY

WEEKLY REPORT:

Report Date July 17, 1985

For Week of July 8, 1985

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date July 5, 1985

By Whom Robert J. Miller, HYDROMETRICS, Helena, Montana

Via Western Air Freight, Airbill #017-4056-9756

SAMPLES RECEIVED:

Date July 8, 1985

By Whom John G. Hayes, ASARCO Incorporated, Salt Lake City, Utah

LOG-IN INFORMATION:

Date July 8, 1985

Type of Sample (water, sediment, other)

Number of Samples

WATER

8 Samples from
3 sites

Yes

No

Were samples properly preserved?

X

Did Chain-of-Custody Sheet accompany samples?

X

Were all samples accounted for?

X

Were Chain-of-Custody Sheets signed appropriately?

X

Were seals on shipping coolers/containers unbroken?

X

Were individual sample containers in good condition
(e.g., no leakage, caps tight, bags sealed)?

X

Were samples put into a secure area and stored
properly upon receipt (i.e., locked room,
locked refrigerator)?

X

COMMENTS:

KC

Samples Analyzed:

COMMENTS:

Were Results Reported? YES NO X

DARobbins
GRStanga

By: John G. Hayes

0070881

ENVIRONMENTAL PROTECTION
AGENCY
JUL 23 1985
MONTANA OFFICE

ASARCO
~~0070882~~

COMMENTS:

Samples Analyzed:

COMMENTS:

Report Date:

by:

John G. Hayes

ENVIRONMENTAL PROTECTION
AGENCY

AUG 12 1985

MONTANA OFFICE

0070884

0070885
NSA/REC

Samples Analyzed:

COMMENTS:

Were Results Reported? YES _____ NO X

Report Date:

BY:

John G. Hayes

cc: JCNickel
MOVarner

DARobbins
GRStanga

0070887

ENVIRONMENTAL PROTECTION
AGENCY

AUG 16 1985

MONTANA OFFICE

ASARCO Incorporated
Department of Environmental Sciences

Gene 0070888
ASARCO

EAST HELENA HYDROGEOLOGICAL STUDY

WEEKLY REPORT:

Report Date August 21, 1985

For Week of August 12, 1985

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date August 16, 1985

By Whom Robert J. Miller- Hydrometrics, Helena, Montana

Via Western Air Freight Air Bill #017 4056 9841

SAMPLES RECEIVED:

Date August 19, 1985

By Whom John G. Hayes - ASARCO, Salt Lake City, Utah

LOG-IN INFORMATION:

Date August 20, 1985

Type of Sample (water, sediment, other)

Number of Samples

Water

45 Samples from 27 Sites

Were samples properly preserved?

Yes No

X

Did Chain-of-Custody Sheet accompany samples?

X

Were all samples accounted for?

X

Were Chain-of-Custody Sheets signed appropriately?

X

Were seals on shipping coolers/containers unbroken?

X

Were individual sample containers in good condition
(e.g., no leakage, caps tight, bags sealed)?

X

Were samples put into a secure area and stored
properly upon receipt (i.e., locked room,
locked refrigerator)?

X

COMMENTS:

ANALYTICAL SECTIONSamples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-6034	AEH-8508-736	TDS, TSS, Conductivity	John G. Hayes
85-6035	AEH-8508-737	TDS, TSS, Conductivity	John G. Hayes
85-6036	AEH-8508-738	TDS, TSS, Conductivity	John G. Hayes
85-6037	AEH-8508-739	TDS, TSS, Conductivity	John G. Hayes
85-6038	AEH-8508-740	TDS, TSS, Conductivity	John G. Hayes
85-6039	AEH-8508-741	TDS, TSS, Conductivity	John G. Hayes
85-6040	AEH-8508-742	TDS, TSS, Conductivity	John G. Hayes
85-6041	AEH-8508-743	TDS, TSS, Conductivity	John G. Hayes
85-6042	AEH-8508-744	TDS, TSS, Conductivity	John G. Hayes
85-6043	AEH-8508-745	TDS, TSS, Conductivity	John G. Hayes
85-6044	AEH-8508-753	TDS, Conductivity	John G. Hayes
85-4644	AEH-8506-544	Pb, Cd, Zn	John G. Hayes
85-4645	AEH-8506-545	Pb, Cd, Zn	John G. Hayes
85-4646	AEH-8506-546	Pb, Cd, Zn	John G. Hayes
85-4746	AEH-8507-601	Pb, Cd, Zn	John G. Hayes
85-4747	AEH-8507-602	Pb, Cd, Zn	John G. Hayes
85-4748	AEH-8507-605	Pb, Cd, Zn	John G. Hayes
85-4749	AEH-8507-606	Pb, Cd, Zn	John G. Hayes
85-4750	AEH-8507-609	Pb, Cd, Zn	John G. Hayes
85-4751	AEH-8507-610	Pb, Cd, Zn	John G. Hayes

COMMENTS:

Metals Digestions

Were Results Reported? YES _____ NO X

Report Date: _____

Samples Analyzed:

COMMENTS:

Were Results Reported? YES NO X

Report Date:

DARobbin's
GRStanga

by:

John G. Hayes

0070891

ENVIRONMENTAL PROTECTION
AGENCY

AUG 26 1985

MONTANA OFFICE

Gene
ASAKCO
0070892

WEEKLY REPORT:

Report Date August 28, 1985

For Week of August 19, 1985

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date August 20, 1985

By Whom Robert J. Miller, Hydrometrics, Helena, Montana

Via Western Air Freight Air Bill #017 4056 9815

SAMPLES RECEIVED:

Date August 21, 1985

By Whom John G. Hayes, ASARCO, Salt Lake City, Utah

LOG-IN INFORMATION:

Date August 22, 1985

Type of Sample (water, sediment, other)

Number of Samples

Water

8 Samples from 3 Sites

Were samples properly preserved?

Yes

No

X

Did Chain-of-Custody Sheet accompany samples?

X

Were all samples accounted for?

X

Were Chain-of-Custody Sheets signed appropriately?

X

Were seals on shipping coolers/containers unbroken?

X

Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?

X

Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?

X

COMMENTS:

ANALYTICAL SECTIONSamples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-6034	AEH-8508-736	Alkalinity	J. G. Hayes
85-6035	AEH-8508-737	Alkalinity	J. G. Hayes
85-6036	AEH-8508-738	Alkalinity	J. G. Hayes
85-6037	AEH-8508-739	Alkalinity	J. G. Hayes
85-6039	AEH-8508-741	Alkalinity	J. G. Hayes
85-6042	AEH-8508-744	Alkalinity	J. G. Hayes
85-6282	AEH-8508-704	pH, TDS, Conductivity	J. G. Hayes
85-6283	AEH-8508-705	pH, TDS, Conductivity	J. G. Hayes
85-6284	AEH-8508-706	pH, TDS, Conductivity	J. G. Hayes
85-6285	AEH-8508-707	pH, TDS, Conductivity	J. G. Hayes
85-6286	AEH-8508-708	pH, TDS, Conductivity	J. G. Hayes
85-6291	AEH-8508-717	pH, TDS, Conductivity	J. G. Hayes
85-6292	AEH-8508-718	pH, TDS, Conductivity	J. G. Hayes
85-6293	AEH-8508-719	pH, TDS, Conductivity	J. G. Hayes
85-6294	AEH-8508-720	pH, TDS, Conductivity	J. G. Hayes
85-6295	AEH-8508-721	pH, TDS, Conductivity	J. G. Hayes
85-6296	AEH-8508-722	pH, TDS, Conductivity	J. G. Hayes
85-6297	AEH-8508-723	pH, TDS, Conductivity	J. G. Hayes
85-6298	AEH-8508-724	pH, TDS, Conductivity	J. G. Hayes
85-6299	AEH-8508-725	pH, TDS, Conductivity	J. G. Hayes

COMMENTS:Were Results Reported? YES ☐ NO ☐

Report Date: _____

Samples Analyzed:

COMMENTS:

Were Results Reported? YES NO X

Report Date:

cc: JCNickel
MOVarner

DARobbins
GRStanga

by:

John G. Hayes

0070895

ASARCO Incorporated
Department of Environmental Sciences

ENVIRONMENTAL PROTECTION

SEP 09 1985

EAST HELENA HYDROGEOLOGICAL STUDY

MONTANA OFFICE

WEEKLY REPORT:Report Date September 5, 1985For Week of August 26, 1985Any Samples Received? YES ☐ NO ☒ (If "NO", go to Analytical)SAMPLES SENT:

Date _____

By Whom _____

Via _____

SAMPLES RECEIVED:

Date _____

By Whom _____

LOG-IN INFORMATION:

Date _____

Type of Sample (water, sediment, other)Number of Samples

YesNo

Were samples properly preserved? _____

Did Chain-of-Custody Sheet accompany samples? _____

Were all samples accounted for? _____

Were Chain-of-Custody Sheets signed appropriately? _____

Were seals on shipping coolers/containers unbroken? _____

Were individual sample containers in good condition
(e.g., no leakage, caps tight, bags sealed)? _____Were samples put into a secure area and stored
properly upon receipt (i.e., locked room,
locked refrigerator)? _____COMMENTS:

KC

-2-

ANALYTICAL SECTIONSamples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-6034	AEH-8508-736	SO ₄ , Cl ⁻	J. G. Hayes
85-6035	AEH-8508-737	SO ₄ , Cl ⁻	J. G. Hayes
85-6036	AEH-8508-738	SO ₄ , Cl ⁻	J. G. Hayes
85-6037	AEH-8508-739	SO ₄ , Cl ⁻	J. G. Hayes
85-6039	AEH-8508-741	SO ₄ , Cl ⁻	J. G. Hayes
85-6042	AEH-8508-744	SO ₄ , Cl ⁻	J. G. Hayes
85-4502	AEH-8506-519	Ca, Mg, Na, K, As	J. G. Hayes
85-4503	AEH-8506-518	Ca, Mg, Na, K, As	J. G. Hayes
85-4504	AEH-8506-517	Ca, Mg, Na, K, As	J. G. Hayes
85-4505	AEH-8506-516	Ca, Mg, Na, K, As	J. G. Hayes
85-4506	AEH-8506-515	Ca, Mg, Na, K, As	J. G. Hayes
85-4507	AEH-8506-514	Ca, Mg, Na, K, As	J. G. Hayes
85-4508	AEH-8506-513	Ca, Mg, Na, K, As	J. G. Hayes
85-4509	AEH-8506-512	Ca, Mg, Na, K, As	J. G. Hayes
85-4510	AEH-8506-511	Ca, Mg, Na, K, As	J. G. Hayes
85-4511	AEH-8506-510	Ca, Mg, Na, K, As	J. G. Hayes
85-4512	AEH-8506-509	Ca, Mg, Na, K, As	J. G. Hayes
85-4090	AEH-8506-528	Ca, Mg, Na, K, As	J. G. Hayes
85-4091	AEH-8506-529	Ca, Mg, Na, K, As	J. G. Hayes
85-4092	AEH-8506-530	Ca, Mg, Na, K, As	J. G. Hayes

COMMENTS:Were Results Reported? YES ☐ NO ☐

Report Date: _____ By: _____

ANALYTICAL SECTIONSamples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-4093	AEH-8506-531	Ca, Mg, Na, K, As	J. G. Hayes
85-4095	AEH-8506-533	Ca, Mg, Na, K, As	J. G. Hayes
85-4100	AEH-8506-538	Ca, Mg, Na, K, As	J. G. Hayes
85-4084	AEH-8506-501	As	J. G. Hayes
85-4085	AEH-8506-502	As	J. G. Hayes
85-4086	AEH-8506-503	As	J. G. Hayes
85-4087	AEH-8506-505	As	J. G. Hayes
85-4088	AEH-8506-506	As	J. G. Hayes
85-4089	AEH-8506-507	As	J. G. Hayes
85-4094	AEH-8506-532	As	J. G. Hayes
85-4096	AEH-8506-534	As	J. G. Hayes
85-4097	AEH-8506-535	As	J. G. Hayes
85-4098	AEH-8506-536	As	J. G. Hayes
85-4099	AEH-8506-537	As	J. G. Hayes
85-4101	AEH-8506-555	As	J. G. Hayes
85-4496	AEH-8506-526	As	J. G. Hayes
85-4497	AEH-8506-525	As	J. G. Hayes
85-4498	AEH-8506-524	As	J. G. Hayes
85-4499	AEH-8506-522	As	J. G. Hayes
85-4500	AEH-8506-521	As	J. G. Hayes

COMMENTS:Were Results Reported? YES ☐ NO ☐

Report Date: _____ By: _____

Samples Analyzed:

[illegible]

COMMENTS:

Were Results Reported? YES NO X

Report Date:

cc: JCNickel
MOVarner

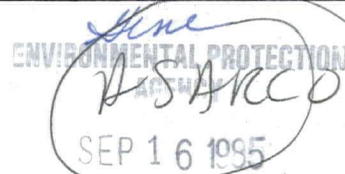
DARobbins
GRStanga

By:

John G. Hayes

ASARCO Incorporated
Department of Environmental Sciences

0070899



EAST HELENA HYDROGEOLOGICAL STUDY

WEEKLY REPORT:

Report Date 9/12/85 MONTANA OFFICE

For Week of 9/3/85

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date 8/30/85

By Whom Thomas Ferns, Montana State Univ., Bozeman Montana

Via Federal Express Airbill #214202251

SAMPLES RECEIVED:

Date 9/3/85

By Whom John G. Hayes, ASARCO Incorporated, S.L.C., Utah

LOG-IN INFORMATION:

Date

Type of Sample (water, sediment, other)

Number of Samples

Soil

12 Samples from 12 sites

Were samples properly preserved?

Yes

No

X

Did Chain-of-Custody Sheet accompany samples?

X

Were all samples accounted for?

X

Were Chain-of-Custody Sheets signed appropriately?

X

Were seals on shipping coolers/containers unbroken?

X

Were individual sample containers in good condition
(e.g., no leakage, caps tight, bags sealed)?

X

Were samples put into a secure area and stored
properly upon receipt (i.e., locked room,
locked refrigerator)?

X

COMMENTS:

RC

0070900

WEEKLY REPORT:

For Week of 9/3/85

Any Samples Received? YES X NO (If "NO", go to Analytical)

SAMPLES SENT:

Date 8/30/85, 9/4/85

By Whom Jim Dushin, Hydrometrics, Helena Montana

via	Western Air Freight	Airbill #017 4056 9826	(8/30/85)
		Airbill #017 4056 9830	(9/4/85)

SAMPLES RECEIVED:

Date 9/4/85, 9/5/85

By Whom John G. Hayes, ASARCO Incorporated, S.L.C., Utah

LOG-IN INFORMATION:

Date: 9/4/85 (for 8/30/85) 9/5/85 (for 9/4/85)

Type of Sample (water, sediment, other)

Number of Samples

Water (sent 8/30/85)

8 samples from 3 sites

Water (sent 9/4/85

8 samples from 3 sites

Were samples properly preserved?

Yes

No

X

Did Chain-of-Custody Sheet accompany samples?

X

Were all samples accounted for?

X

Were Chain-of-Custody Sheets signed appropriately?

X

Were seals on shipping coolers/containers unbroken?

X

Were individual sample containers in good condition (e.g., no leakage, caps tight, bags sealed)?

X

Were samples put into a secure area and stored properly upon receipt (i.e., locked room, locked refrigerator)?

COMMENTS:

Samples Analyzed:

[illegible]

Were Results Reported? YES NO X

Report Date: 9/13/85

cc: JCNickel DARobbins.
MOVarner GRStanga

by:

John G. Hayes

ANALYTICAL SECTIONSamples Analyzed:

<u>ASARCO Lab No.</u>	<u>Sample I.D. No.</u>	<u>Parameter</u>	<u>Analyst</u>
85-5329	AEH-8507-616	Cd, Zn	J. G. Hayes
85-5330	AEH-8507-617	Cd, Zn	J. G. Hayes
85-5331	AEH-8507-618	Cd, Zn	J. G. Hayes
85-5904	AEH-8507-628	Cd, Zn	J. G. Hayes
85-5905	AEH-8507-629	Cd, Zn	J. G. Hayes
85-5906	AEH-8507-630	Cd, Zn	J. G. Hayes
85-5927	AEH-8508-701	Cd, Zn	J. G. Hayes
85-5928	AEH-8508-702	Cd, Zn	J. G. Hayes
85-5929	AEH-8508-703	Cd, Zn	J. G. Hayes
85-6366	AEH-8508-749	Cd, Zn	J. G. Hayes
85-6367	AEH-8508-750	Cd, Zn	J. G. Hayes
85-6368	AEH-8508-751	Cd, Zn	J. G. Hayes
85-6568	AEH-8508-752	Cd, Zn	J. G. Hayes
85-6569	AEH-8508-753	Cd, Zn	J. G. Hayes
85-6570	AEH-8508-754	Cd, Zn	J. G. Hayes
85-6714	AEH-8509-801	Cd, Zn	J. G. Hayes
85-6715	AEH-8509-802	Cd, Zn	J. G. Hayes
85-6716	AEH-8509-803	Cd, Zn	J. G. Hayes
85-6857	AEH-8509-804	Cd, Zn	J. G. Hayes
85-6858	AEH-8509-805	Cd, Zn	J. G. Hayes

COMMENTS: _____

Were Results Reported? YES _____ NO _____

Report Date: _____

Samples Analyzed:

COMMENTS: _____

by: John G. Hayes
John G. Hayes

0070905

ENVIRONMENTAL PROTECTION
AGENCY

OCT 01 1995

MONTANA OFFICE